AVICULTURAL MAGAZINE

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AVICULTURAL MAGAZINE

THE JOURNAL OF THE AVICULTURAL SOCIETY
AND THE AVICULTURAL SOCIETY OF AMERICA

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A VISIT TO CORSICA IN 1951

By C. S. WEBB (London, England)

Corsica needs no introduction as an island of beauty. In April and May it is particularly lovely with flowering Cistus (rock roses) dominating the landscape and giving off a delicate fragrance that seems to linger in one's nostrils long after leaving the island.

The north-west coastal region, with its mountains and streams, and rocky shores studded here and there with delightful sandy beaches, can compare with anything of the kind anywhere in the world. Combined with this natural beauty there is an air of peacefulness which makes Corsica the ideal place for escape from the hectic life of our cities.

The island—steeped in Napoleonic tradition—is blessed with a salubrious climate and is lapped by the clear waters of the Mediterranean, which yield enormous quantities of lobsters for shipment to the Riviera and France. The other more or less natural wealth comes from olives, chestnuts, and goats. For a long period under Genoese domination, the Corsicans still speak an Italian patois among themselves, but quickly revert to French when discoursing with tourists and other foreign elements. One of the great charms of the island is its sparse population (away from the few towns) and the opportunities one has of lying on some delightful deserted beach being pickled in the sun, while gazing on some distant snow-capped mountain.

Corsica is nowadays within easy reach of London, as within a few hours of London Airport one can be at Nice, from where it is a simple matter to do the hundred mile voyage by sea or plane to one of several points on the island. Periodically a boat goes direct from Nice to Calvi, which is worth linking up with as this lands one at a renowned beauty spot. Calvi's quaint and picturesque harbour is dominated by an old Genoese fort and a delightful sandy beach fringed with pine trees stretches for miles. As a background to this there are Cistus-covered hills and distant snow caps.

The birds of Corsica are fairly numerous if one includes the large

variety of winter visitors which nearly all disappear by late April and May. There are also a number of migrants from Africa which use the island merely as a halting place, and after a few days move to the mainland to breed. There are, however, a few migrants from Africa which spend the summer in Corsica. The resident birds are very interesting, though many of them are merely geographical races of well-known British and Continental species. When sub-specification is based on such things as greater or lesser wing measurement, such differences can hardly be apparent in the field, but there are quite a number of Corsican birds which can be seen to differ considerably at first glance from the same species inhabiting our own shores. Of these the Common Jay and some of the Tits are the most noticeable.

Spring in Corsica in the year 1951, as elsewhere in Europe, was late in arriving; the local inhabitants reckoned it to be one of the coldest in living memory. For this reason there were few signs of breeding activities in early May.

Almost certainly the first land birds to be seen will be Goldfinches, as these frequent the trees lining the main street of Calvi, and in fact are the commonest birds in the island. In any open places they are particularly numerous and can often be seen feeding in company with Citril Finches (*Spinus citrinella*) which are also very plentiful. The latter are no less striking than goldfinches and remind one somewhat of the Cape Canary.

Warblers are most interesting though difficult to identify in the thick scrub until one has become familiar with them. Perhaps the most numerous is the Sardinian Warbler (*Sylvia melanocephala*) which is resident. This bird, with its black cap, can be confused with the Black-cap Warbler (*S. atricapilla*)—also numerous—but its white underparts are the best distinguishing feature in the field. I had momentary glimpses of many warblers that I was unable to identify with certainty, but on a few occasions got a clear view of the Dartford Warbler (*S. undata*) and Marmora's Warbler (*S. sarda*) and, of course, the Lesser Whitethroat. While collecting Savigny's Tree Frogs in the swamps near Calvi, I frequently heard the lively song of Cetti's Warbler (*Cettia cetti*) which is plentiful though not easy to see. It gives vent to its song as a rule from the middle of a dense thicket bordering the swamps.

Of the Turdidæ, Blackbirds are seen sparingly in spring and are among the few that remain to breed. In winter they are so numerous that "Chasse aux merles" is one of the local sports. No thrushes were encountered though these also are common winter visitors. To me the most interesting of this family were the Blue Rock Thrushes (*Monticola solitarius*). Corsica is very rich in rock scenery and at Piana the landscape with its deep ravines and eroded rocks of fantastic

shapes is a wonderful setting for these birds. It is a common sight to see a solitary specimen perched motionless for a long period on some prominent boulder.

The most prevalent birds in this locality were Crag Martins (*Riparia rupestris*) some of which were nesting. Elsewhere, in certain open situations where there were low bushes and grass, Stonechats were seen, but they do not remain at low altitudes for long in the spring ; as the weather gets warmer they go higher to breed.

On the hillside at Calvi Hoopoes were fairly common and could be heard on all sides. In this locality, there were also Golden Orioles. I saw European Bee-eaters only once at Calvi, but further west on the road to Ajaccio they were fairly numerous, sitting on the telegraph wires and occasionally hawking flying insects.

The local Sparrow—common in the towns—is the Italian species (*Passer italiæ*) which differs from *P. domesticus* by its chestnut upper parts, including the nape and the crown, and by its apparently whiter cheeks and ear coverts. Other common seed-eaters are the Greenfinch and Chaffinch.

I never saw the European Starling, though it is a common winter visitor. I understand they move northwards in February or March. The Unicolor Starling (*S. unicolor*) is resident, and I saw quite a few at Calvi, though not in flocks.

The Hooded Crow (*C. cornix sardinius*) is common and resident, and is a conspicuous bird in open coastal regions. Carrion Crows were also seen, and at Calvi about a mile from the town on the municipal garbage heap I had the satisfaction of seeing the two species together. The sight was certainly a memorable one for here in one large assembly were dogs, pigs, fowls, Carrion and Hooded Crows, all feeding happily within a few feet of one another. I cannot say if Carrion Crows breed in Corsica—they are supposed to be merely winter visitors—but they were there on 12th May. It is supposed to be the rule that where these two species overlap they interbreed, so in Corsica there is either an exception to this rule or else the Carrion Crows I saw were late in departing. When not feeding the two species kept apart. As already pointed out, the season was one of the latest in living memory, so perhaps this occurrence has no significance. Ravens were also seen and are apparently resident, though not numerous.

Shrikes are fairly plentiful in open country, the commonest being the Red-backed Shrike (*Lanius collurio*) though the Woodchat Shrike (*L. senator*) is conspicuous in certain localities. Both these could be seen perched on bushes waiting to pounce on grasshoppers, etc.

The Spotted Flycatcher (*Muscicapa striata*) is in fair numbers and appears to be resident whereas the Pied Flycatcher (*M. hypoleuca*) seen in late April seemed to have disappeared by the second week

in May. In the mountain forests around Vizzavona, the highest point reached by the railway that traverses the island from Ajaccio to Bastia, a race of the Common Wren is fairly plentiful. Here in the pine trees Tits were very noticeable and included the Great, Blue and Coal Tits. Up here the snow-covered mountains seemed only a few hundred feet above us and the nights were bitterly cold. The only Woodpecker seen was the Great Spotted.

One of the most delightful places in Corsica is the village of Porto, situated among magnificent mountain scenery alongside a rocky stream and less than a mile from the sea. Here the Crag Martin was very numerous, and as already mentioned was nesting a few miles away up on the rocks of Piana. Occasionally at Porto one saw in a single congregation Crag Martins, White-bellied or Alpine Swifts (*Micropus melba*) and House Martins, all whirling through the air together catching insects.

Rock Doves (*Columba livia*) were numerous here and could often be seen swooping down into ravines in small flocks—their white rumps being very conspicuous.

Birds of prey were in evidence, especially in more open situations bordering steep woody or rocky hills. A race of the Common Buzzard was noticeable at Calvi and when in flight seemed nearly always to be mobbed by Hooded Crows. Kestrels and Common Kites were also plentiful here. In the bay at Calvi Herring Gulls were much in evidence though other sea birds were scarce. On one occasion I saw six Shags together.

To see anything like the total number of resident or visiting birds in Corsica, one would have to travel a much wider field than was possible on a short holiday, as the country is of considerable size and varies tremendously. Down the east coast there is a long line of lakes and swamps which abound in waterfowl and waders, etc., but I had no time to visit these.

* * *

PSITTACORIAL II

MANYCOLOURS—COCCIDIOSIS—SULPHA DRUGS—AVIARY SITES—FERTILITY—VARYING THE DIET—BREEDING AGE—CONJUNCTIVITIS—CONCUSSION—LUTINOS—COCKATIELS

By E. N. T. Vane (Great Missenden, Bucks, England)

Last year a few notes were contributed under the above heading in the hope that they might interest other keepers of Parrot-like birds. From subsequent conversations at meetings and elsewhere it is evident that some members have at least read them. I am therefore prompted to offer a few more, particularly so when our Secretary in his recent most valuable book on *Parrot Breeding Records* goes so far as to state on at least two occasions " bred by Vane . . . but not recorded " as there are one or two other instances which he has not heard about even yet. In passing, the first observation I would like to make is that in the early days of the Avicultural Magazine almost any opinion expressed in one issue was certain to be refuted, contested, or ridiculed in the correspondence columns of the subsequent number by more than one reader. Is it laziness that leaves our correspondence section so inert? Probably to-day it would be rephrased as apathetic lethargy or lethargic apathy.

During the post-war years Manycolours have done very well in my aviaries, yet they were once regarded as a hopeless proposition for breeding or even keeping alive. Lord Tavistock's book reports that they are subject to septicæmia and septic fever in certain districts and hopeless to keep alive. This was, of course, written many years ago and, taken in conjunction with the phrase "in certain districts", I feel confident that these two diseases were, in fact, only some form of what to-day is called cæcal coccidiosis. This is deadly enough, but in domestic poultry scientific research has discovered that it can be controlled or neutralized by the use of sulpha drugs.

This brings us to two interesting items for consideration. First, the use of these drugs for aviary birds and, secondly, the question of moveable flights. Again, in my opinion we come up against the individual bird. In literature published on coccidiosis there are many conflicting statements and theories put forward. With different birds kept under identical conditions some appear to be immune to disease, others are particularly susceptible, some victims are quite unable to resist the disease whilst others respond very rapidly to sulpha drug treatment. Very briefly, the coccidia start their life cycle in one bird from which they must emerge into the open air before being picked up by another bird which becomes its host in its lethal stage. It may be accepted that coccidiosis is very prevalent in poultry and also in wild birds, consequently it is easily spread and may occur in any

aviary at any time, the objective therefore is to try and make one's stock immune to infection.

Immunity can be achieved under certain conditions by the use of sulphamezathine. For the drug to be effective it is necessary that the birds under treatment be actually infected, as it is the coccidia themselves that develop the immunity *not the drug or the bird.* Moreover, the use of the drug on an uninfected bird may result in the individual developing a resistance to the beneficial effect of the drug if and when the coccidia eventually do enter the bird's system.

Correct diagnosis is consequently of exceptional importance, the only reliable method being by microscopic examination of the excreta in a laboratory. Even this is not infallible as I am informed that under certain stages of development it is possible to obtain a negative result from an infected case. One reads that the symptoms to look for are general debility and mopiness, diarrhœa, and even blood discharge in the droppings. I should imagine that any such case would be beyond treatment. Paralysis of the lower limbs is also an indication, and a sufferer is not always too far gone in this condition. Obviously, this is really a case of " look before you leap " being equally as true as " he who hesitates is lost " ; you are bound to be wrong whatever you do. Personally, whenever a possibility of coccidiosis is suspected I revert to using the drug before the patient becomes so ill that one is going to lose it anyhow. But at the same time, the indiscriminate use of the drug as a precautionary measure is both dangerous and useless.

Treatment consists of simply administering sulphamezathine in the drinking water. A 16 per cent solution can be obtained which is mixed with the ordinary water in the proportion of 2 fluid ounces to the gallon, or in smaller quantities this is equivalent to 1 drachm to half a pint. The patient must not have access to any other source of drinking water whilst being dosed, and the period lasts for five days and no longer or the metabolism of the bird may be unbalanced. The patient must obviously be housed indoors whilst being treated or it would be able to drink rain water or even dew. If no improvement is achieved from the first dose the process may be repeated after an interval of ten days or so. Apparently, some individuals develop an immunity naturally ; a situation might therefore arise where a healthy bird to all outward appearances is supplied with a succession of companions which die off, whilst the original inmate remains in the best of health. Before leaving this subject I should mention that Sulphamezathine is a registered name by Imperial Chemicals, and the full title of the drug is sulphadimethylpyrimidine, which may be procurable under other trade names for all I know.

The second point that I referred to as of interest concerns moveable flights. The advantage claimed for this method is mainly that it gives

an opportunity for the soil to be rested and disinfected. It appears to me that this is quite useless as a means of preventing a disease such as the deadly scourge now being considered, since we know it is carried extensively by wild birds. The coccidia can travel in the earth by many means, such as earthworms, mice, attendants' boots, etc., moreover, many of my aviaries and many others known to me have been in constant use on the same site for fifteen years. During that period no epidemic of any kind has carried off a large batch of birds at a sweep. There have, of course, been losses, many more than I like to have, but never a wholesale epidemic among parrakeets. I can recall one occasion about five years ago when a P.M. report found coccidiosis, and the suggestion was put to me that I should send samples of the droppings of all the birds for test at 2*s*. 6*d*. a time. Well, I had over 400 birds just then, so I did not take advantage of the offer, and there were no other losses either. As I had Manycolours at the time and they were reputed to be one of the most susceptible species to septic illnesses I have come to the conclusion that it is not necessary to move the flights and no useful purpose is achieved by doing so. Every spring, however, the turf is replaced with entirely new meadow turf and the ground is forked over and dressed with agricultural salt, lime. Since I heard about ammonia as an effective antidote for coccidia, the ground has also been watered with a solution before laying the new turf. Whilst this operation is in progress each pair of birds is shut in the shelter for a few hours only and come out to a new flight with fresh grass, perches, and the nest-boxes overhauled and refilled. I am informed that the most efficient disinfectant for washing down shelters, perches, etc., is ordinary ammonia. With this treatment the stock appears to be as healthy and fertile as ever.

Mention of fertility in conjunction with sulpha drugs brings up another problem. It has been suggested that the use of these drugs may affect fertility for a considerable period. Another good reason to be very careful not to make indiscriminate use of them. Coccidia are apparently most active in moist and warm surroundings, excessive cold may increase mortality among them, but it is not necessarily going to eradicate them completely. In fact, one would expect the most favourable periods to be a wet summer or warm autumn, and this is generally found to be the most vulnerable time when unexpected losses do actually occur in the aviary, at least in my experience. I have not noticed any depreciation in the fertility of any birds treated with sulpha drugs, but having had this point always in mind I have always avoided its use after December except in real emergency. Fortunately the ensuing months are usually so cold that the coccidia appear to be at least dormant, if present. I do recall, however, that when an exceptionally mild February has been encountered this is

usually the season in which the most unexpected tragedies occur and the results are comparatively disappointing from a breeding viewpoint. Maybe there is some connection, or maybe it is just a coincidence.

My Manycolours have led me into deep waters and a long way off the original course. Let us go back to them for another little item of interest, somewhat elementary after the heavy going above. I am often asked by beginners what mixture I use to feed my birds. Strange as it may appear, I blend my seed as it is used every day, the reason being that in my opinion the birds like a change, so an effort is made to vary the diet to some extent ; it should also vary with the season, too. Naturally, the individuality of each bird is a very important factor here. Some will only select the particular seed to which they are partial ; some, like children who elect to feed on chocolate and ice cream, might choose to live on nothing but, say, hemp. For that reason I have discontinued the practice of supplying different seeds in different dishes, the majority of individuals did not partake of a balanced diet but hogged their preferences. It surprised a lot of bird-keepers during the war to find that their birds, accustomed to the best super-Spanish canary, three or four varieties of sunflower, hemp, etc., could not only keep alive but could keep in remarkably good condition and even breed good youngsters on a mixture of third-rate oat screenings, unmillable wheat, buckwheat, and occasionally a " blitzed monkey nut " as a special treat, supplemented very rarely with a teaspoonful of canary (with the usual percentage of mice dirt) or dusty sunflower. I can recall how all these seeds were mixed up and almost counted out, the poor birds selected the sunflower and canary first and only turned to the substitutes when hunger forced them. For this reason it became necessary only to feed on alternate days so that the less palatable seeds were not used at all. With the memory of those days, I did not mind making up my mixture and varying it from week to week, even making slight adjustments for individual pairs in order to keep them in top condition.

All the Psephotus Parrakeets need more canary than the larger broadtails for instance. Some people are very doubtful about the use of hemp. In my opinion it is a wonderful seed ; it certainly increases fertility and fecundity but, of course, it is an oily and consequently heating food. One hen Manycolour that I had—she died about a year ago when she was quite twenty years old—made a habit of plucking her chest and belly absolutely bare when the breeding season came along. When she came to me she was in a half-naked state and I was told she was pretty well useless. I used to give her all the hemp she liked to take, much of it being sprouted ; she was in an outdoor flight and when the moulting season came round she regained her plumage fully and was duly mated the following spring. For many years she reared families every season, every one

of the youngsters was perfect and none ever inherited the vice, and to-day I still have some of her children and grandchildren. In spite of the generous supply of hemp the cock never suffered any ill effects, and although the hen always plucked herself at nesting time, she always moulted out well in the late summer and remained well covered during the winter. I would never hesitate to give hemp to practically any birds rearing a family ; the only times it should be rationed strictly is in the hot weather when no breeding is going on with that particular pair. Sprouted wheat and hemp are beneficial at all times in reasonable quantities. Oats should be rationed in hot weather, but do no harm in the winter. Similarly, I believe buckwheat is a very good food, although some Budgerigars' deaths were attributed to impacted crops when it used to be their mainstay for lack of better. The chief thing is to encourage any bird to consume as much green food as possible, the only time this should be limited or withheld is during frosty weather. Plucked or cut green food is a very different proposition to green food actually growing in the ground, and mention of this is made only because so many people turn round and ask why wild birds do not get enteritis through eating frozen green food.

Another rather elementary question frequently asked by anyone taking an interest in a fresh species is " How old are the birds when they start breeding and how soon are they given a nest-box ? ". With Manycolours my boxes are never shut up ; the birds generally show an inclination to start very early, probably before February is out. Closing the boxes seems to have no effect on the enthusiasm of a cock broadtail, it only makes him bad tempered and he takes it out of the poor hen as though it was all her fault. The drawback to allowing early nesting is that Manycolours are inclined to stop brooding the young at an early stage, frequently they are only ten days old when the hen starts to leave them unbrooded at night ; this, of course, varies considerably with individuals ; therefore if the nights in April turn cold you stand a very good chance of losing the clutch, especially if it is a small one of two or three ; nevertheless, I generally take that chance. I have never lost a Manycolour egg-bound so there is little fear of that. I always keep a few of those small flat paraffin heaters, and if a cold spell was met with just when it was most inconvenient, I would in such an unfortunate occurrence put one underneath the nest-box, as it might help.

Some of my best young Manycolours were reared by a year-old cock mated to a two-year-old hen. They only had one clutch of three, but they were the brightest and largest ever reared by any of my birds. The majority of the pairs I have had were double-brooded but not all of them are. Possibly age has some bearing on this, young birds go to nest a little later than fully adult ones, which is probably a very good thing. Older birds have nearly always had two clutches

and have been prepared to try a third ; this is a case where it would be advisable to cover the nest-hole up. No bird I have kept has been more insistent on using their particular nest-box, and if it is ever necessary to change their quarters, always try to keep the same box for their use. The old hen who used to pluck herself always *would* use a old rotten log which was patched up and filled with old nails and wire to hold it together, yet she had the choice of three lovely solid boxes. When one year the old log was removed she refused to go to nest at all until it was returned, when she was inside within a few seconds of my getting out of the flight. On the other hand, one pair I have have never attempted a second brood even when the first one was hatched in March ; they are now three years old. A further illustration of the idiosyncrasy of a parrakeet. Most broods contain three or four youngsters with all the birds I have had, and they seldom lose them except in the instance quoted where they have gone to nest early and been unfortunate with weather conditions.

One thing leads to another when talking about birds. A disease which sometimes affects the Psephotus Parrakeets is conjunctivitis in some form. Probably several different forms are encountered, but all are generally regarded by bird-keepers as " eye disease ". The most susceptible subjects are Grass Parrakeets and Polyteline, although many others are affected at times. Hitherto it has invariably eventually proved fatal, in spite of some victims lingering for months. The chances of importing Neophema by boat without catching this highly-infectious complaint were regarded as about fifty-fifty. The cause was attributed to overcrowding and filth—unclean perches in particular. It is my theory that the main cause was mishandling of the bird, and that dirt is only an auxiliary factor. Eye disease is encountered in the natural state of liberty, and an instance is quoted in the AVICULTURAL MAGAZINE, 1932, the interesting theory being submitted that the conditions of drought which had been experienced for some years were followed by severe sand storms which had most probably irritated the eyes of the birds.

I kept this in mind when some years ago I had a cock Turquoisine and two Bourkes for whom I had no mates, and could not obtain any at that time. These birds were placed in small cages about 18 inches by 10 inches by 10 inches ; the floors were covered with sand, a supply of grit and cuttle provided, two perches were fixed, and the feeding and drinking vessels were arranged on hinged doors so that they could be refilled without putting a hand inside the cage. The object of this arrangement was to avoid startling the inmate in any way. The cages were placed in front of a window facing south and no one was allowed near the cages. For four months the birds were kept in these quarters without being cleaned out at all. I had effected a cure of eye disease and was really anxious to try it on a Grass Parrakeet ;

but not one of these birds got any sign of it. This rather confirms my theory that it is not caused by dirt alone, because these perches became coated with the usual grey greasy deposit found under such conditions and the droppings collected in pyramids. The trouble starts when the birds are continually mishandled, and get foreign bodies on the eye. In endeavouring to obtain some relief by rubbing the eye on their perches an irritation is set up which, in conjunction with the dirty perch, starts and rapidly spreads the disease.

When I first saw sulphanilamide recommended as a cure for eye trouble I could see no connection with internal treatment of an external complaint such as this. But several medical men have confirmed that these drugs will cure such an ailment, and my own experience has proved it. In using this drug it was necessary to handle a patient three or four times a day and this rather looked as though any good one might do would be more than counteracted by the harm from the shock the bird would suffer, however gentle one tried to be. Some months later I passed this information to another aviculturist who had a Grass Parrakeet suffering with conjunctivitis, and he eventually reported a cure.

About this time I had a Salwatty King which had been taking part in the film *Blue Lagoon*. This process entailed a good deal of handling to move the bird from her usual quarters into the " props " parrot cage. Every week-end for about ten weeks she came home and was released into her usual 30 ft. aviary. The whole of the time her cages were kept unusually clean owing to the frequency with which her quarters were changed. Some weeks afterwards she developed eye disease, and again I was convinced that handling and not dirt was the cause. Rather in desperation, I decided that as the bird would most probably die anyhow, I might as well try this improbable-sounding cure. A medical friend suggested that better results might be obtained by using another similar drug, sulphamerazine, the advantage of which was that its period of effective activity was considerably longer than sulphanilamide. Eventually, I had a solution made up of 60 grains in suspension in 1 fluid ounce, which was to be administered only once in every twenty-four hours. The size of the dose had to be arrived at by guesswork, and for a King about $1\frac{1}{2}$ grains was used ; this, of course, would have to be considerably less for a Grass Parrakeet. Within ten days the swelling was gone and there was no repetition of the trouble. I have since tried it on other birds with equally happy results. It is essential to change the perches daily because the danger of reinfection is great owing to the bird developing the habit of trying to obtain some relief by rubbing the inflamed eye. The administration of the dose, by the way, was quite simple. A fountain pen filler, with a small elastic band to mark

the amount of the dose slipped round the tube, was held against the lower beak and squeezed whilst the bird's head was held steady in the left hand. A small hypodermic without the needle might have been more efficient in skilled fingers.

The biggest nightmare for all breeders of Grass Parrakeets is without doubt concussion. Some say that this is an overrated danger, but I can remember the terrible reverses met with in the early days of Splendids. Since that time I had begun to think that perhaps I had been exceptionally unfortunate as there had been scarcely any losses from that cause for many years. However, when I moved all my birds, staggering losses were met with among Elegants and Bourkes. Many of these birds were moved into temporary indoor flights about 8 feet by 6 feet by 3 feet. The ceilings and walls were of hardboard, which may have been responsible for some of the casualties, but all trouble stopped when the birds were put into small stock cages about 2 ft. 6 in. by 1 ft. 6 in. by 1 foot, one pair in each. Grass Parrakeets, Bourkes in particular, are somewhat crepuscular in habit and can frequently be heard flying about just after dark. As the light was left on a time switch, although a small nightlight was left on all the time, the birds may have been so startled by the sudden turning off of the light that they committed suicide. I used to go in each morning dreading to find another casualty; two broke their necks but most had badly bruised skulls, generally the blue bruise was at the back of the head and base of the skull.

Having kept a number of these birds—some of those lost were six or seven years old and regular breeders—without any undue losses may I offer this warning to recall the matter to others. Once settled in their surroundings there will probably be no further trouble provided they are not changed round into another flight or subjected to any interference from hawks, owls, or other night marauders. The trouble is only met with when the birds are startled or unfamiliar with their surroundings. When turning new birds out, cover the ends of the flight with plenty of leafy branches, especially in front of any solid surface. Victims are usually perfectly fit one minute and dead or apparently paralysed an hour or even a few moments later; they never live more than twenty-four hours. Incidentally, Lineolated Parrakeets also appear to be subject to this failing.

Perhaps it is time I closed these notes, but after all, the Editor asks for them, and she can always slash them or save a bit for next time, so I will continue with one subject on which our Secretary says I have neglected to make a record—Lutino Ringnecks. I have reared a number of these in recent years, one pair of birds, both yellow, used to rear four young every year, all lutinos. They, of course, were stolen from my old aviaries before I moved down here. They never had anything but perfect youngsters and only one season did they

have one clear egg. They actually reared fifteen ; I wonder what has happened to them now. That record, of course, illustrates the Mendelian theory well, but some of my others are not so satisfying. One split cock mated to a lutino hen only reared one lutino out of three nests. Another pair, again split cock and lutino hen, have reared four green, three green, two lutino and two green, and finally two green birds in successive nests. Another pair, split cock and green hen, have reared four green, three green and one lutino, two green and two lutino, four green, four green, which means only three lutinos out of twenty birds. Another pair that are not mine have reared eight lutinos in the last three seasons although both parents are green birds.

It is evident that two separate forms of lutinism exist in Ringnecks even as there are two in Budgerigars, one being sex-linked and the other non-linked. This is borne out by the results obtained by our President at Foxwarren, as he records in the AVICULTURAL MAGAZINE, 1938 and 1940, that two lutino birds reared six youngsters which were all *green*. Two lutinos of the same type can only produce 100 per cent lutino young. Nevertheless, I believe that there are only sex-linked birds left in this country to-day. It may be that the small percentage of lutinos obtained is due to the embryos being weaker or parents not caring for yellow monstrosities among their green family.

Now that the Duke of Bedford has succeeded in rearing the lovely blue variety of this species we can look forward to the evolution of a white Ringneck. Naturally, it will take a couple of generations to achieve this, and with young Ringnecks unsexable until they assume adult plumage this may take some years yet. Incidentally, many people are not quite clear when Ringnecks do assume adult plumage ; they are just about two and a half years old when the ring starts to appear. It usually shows first almost on top of the head, considerably higher up than its eventual normal position as the pigment starts to show before the quill feathers have attained their full length.

Of course, the easiest way to produce the white would be to mate a lutino cock to a blue hen, as the young could be sexed from birth. All lutino birds would be hens split for the blue factor, and all the green birds would be cocks split for both lutino and blue ; there would not be any white in this generation but the sex linkage would automatically determine the sex. By mating a blue cock to one of these lutino/blue hens the white form could be anticipated, and it would be a hen. White of both sexes could only be obtained in two generations by mating brother and sister bred from the lutino cock and blue hen.

Although the Avicultural Society is well past its jubilee, no article has ever appeared in the whole of that period dealing exclusively with breeding the Cockatiel. It is rather amazing, but although one may

find some indices containing about half a dozen or more references to this bird, when you turn to the page indicated you have to read it two or three times before you discover one little line where the word Cockatiel is squeezed in a list of breedings or you find that it is the page of P.M. reports. I should imagine that no bird is more of an individualist, because I have never been able to take the slightest liberty with any Cockatiel during the breeding season, one look has always been the end of that clutch. Yet many breeders state that they have even taken nestlings out and cleaned their quarters before returning them, and the parents have not objected at all. Another thing, they frequently will not breed in the first year in new surroundings, and many young birds refuse to take any interest in matrimonial affairs before they are two years old. I am well aware that this is not the experience of many breeders, but in view of all that Cockatiels must have done for aviculture by gaining new enthusiasts I think they deserve a mention in dispatches. Like the poor, they are always with us.

* * *

MY FIRST CANYON WREN

By Carl Naether (Sherman Oaks, California, U.S.A.)

I have a good friend who lives on a very dry hillside away off the beaten paths in Southern California. He is exceedingly bird-minded, and he hails from Poland, where his love for birds was born. Though nearing seventy, he waxes as boyishly enthusiastic over his feathered charges as a seventeen-year-old might. He really is attached to his birds and knows them and studies them from morning till night, month in and month out, year after year.

Anyhow, Felix, that's part of his name, telephoned me with excitement appropriate to such a rare find, that he had caught " him " at last. He wouldn't identify " him "—but I suspected from the emotion in his voice that it was the Wren which I had wanted for several months. A Canyon Wren (*Catherpes mexicanus conspersus*) to be specific. This fascinating little busybody had been " chinking " (" chink, chink ", is his usual call) about the hillsides in Felix's neighbourhood for several months, diligently examining every cranny and corner of outlying houses, rockpiles, and similar hiding places for delectable spiders and other Wren food. Always he would make his presence known by his oft-repeated " chink, chink ".

So when this Canyon Wren searched for edibles about Felix's bachelor dwelling, he, remembering my wanting the bird, simply opened the back door and literally drove this elusive little chap

through it and into his bedroom, where he caught him. Having caught my friend's enthusiasm over the rare catch, I literally jumped into the old Ford and drove the twenty-five miles' distance in good time. Sure, enough! It *was* the Canyon Wren—beautiful little fellow, with his chestnut-brown back and greyish-white breast, the long, slightly curved beak, the cheery "chink" or "clink".

Now he occupies a roomy, glass-fronted cage, furnished with rocks and batches of dried leaves and the like to make the little chap feel at home. Some perches are placed almost upright, for the Canyon Wren is an inveterate climber—nothing seems too steep or too straight for him to hold on to. His movements are rapid, very rapid, in that he darts from place to place, always on the go, and always eager to hide. Of course, I provided him with several good hiding places. The result was that he would never show himself until I was some distance away from his cage. Then he would appear as if from nowhere, spot the mealworm I had dropped, seize it, and hasten to his retreat behind a big rock, where undisturbed he could attend to his meal.

Having had other shy birds, I thought that in due time this Wren would confide in me, even to the point of taking mealworms and other live titbits from my hand. But no, not this bird! Daily he would sing his charming little song and entertain me with his many antics—but always at a distance. So after six months of playing hide and seek with me, I thought I would remove the rocks behind and under which he was wont to stay in my presence, leaving him hiding places still, but not so many—and places where he could hide only partially.

The stratagem worked! My Canyon Wren has become much less shy, will not draw away in my presence, but remains in expectation of getting mealworm, spider, or moth. Who knows, soon, perhaps, he will even sing in my presence—his magnificent, descending scale song. No, not soon—I know my Canyon Wren—months, many months, will pass before he will approach me fearlessly. For he is ever wary. This does not mean that he does not like human beings. He does like them—but at a distance. Meanwhile this handsome little charmer, considered the most beautiful of all North American Wrens, entertains me and mine royally with his unique antics, as lovely and spirited a bird as any I have had.

* * *

HOMING CAPE CANARIES

By JOHN H. WALMSLY (Port Elizabeth, South Africa)

I have been following with great interest the numerous articles published recently by His Grace the Duke of Bedford, in connection with his efforts to establish a strain of homing budgies. Whilst I have no specialized knowledge of budgies and their habits, etc. (I leave this little group in the capable hands of my wife, who has, at the time of writing, about five or six pairs all busily raising chicks), I am most interested in the experiments from a general point of view. Over the course of several years of bird keeping I have had numerous experiences with a fairly large variety of aviary birds, which lead me to believe that there are many species which could be trained as homers. I have noticed that the homing instinct is very strong in certain members of the Serin Group. My experience with budgies when released had, until recently, convinced me that the homing instinct was non-existent in these birds. Those that I have from time to time released invariably shot straight up into the air and then made off as fast as possible, never to be seen again. It is to be hoped that His Grace will continue to publish in detail the results of his experiments in this field as they greatly contribute to our knowledge.

In that excellent work by Dr. Austin Roberts, *Birds of South Africa*, are details concerning the Cape Canary (*Serinus canicollis canicollis*), with an illustration. It is this species which is dealt with in this article, but before relating my interesting experience of its strong homing instincts I should perhaps mention the fact that I am not in any way conducting any special experiments in this field and only wish to record the facts for the benefit of those who may be interested in experimenting further. Being intensely interested in bird life in all its aspects, I am a member of the Port Elizabeth and District Pigeon and Cage Bird Association, the Eastern Cape Wild Birds Protection Society, and, more recently, the Avicultural Society. Among other things I make a practice of buying up collections of aviary birds when their owners tire of them or have to dispose of them for other reasons. I recover some of my cash by reselling them to other collectors. Many of them are sick, diseased, maimed, etc., when they come into my possession. These I carefully nurse back to health, and at times I frequently find myself in possession of too many of the more common and cheaper local wild birds ; these I release as soon as they are able to fend for themselves. The Cape Canary falls within this category.

Last year I heard of one such collection being for sale and went along to inspect it. A brief inspection revealed the fact that the owner had little idea as to the basic requirements of cage birds.

About 200 birds were in an enclosure not large enough to accommodate more than two or three pairs. Most of the birds were infested with grey lice and mice ran up and down the wire netting in front of my eyes. At the time I had an exceptionally large stock of various birds on hand and was rather stuck for room, and it was therefore impossible for me to take over the entire collection. I eventually acquired about forty of the more common Cape birds at a price which nearly broke my heart. These I duly disinfected and isolated, releasing them as they became ready and able to fend for themselves once more. The remnants of this bunch consisted of three cock and four hen Cape Canaries, which I placed in a fairly large breeding cage in my garden. Eventually their turn for release came round, and one bright sunny morning I opened the cage door, watched them fly off into the thick surrounding bush, and then left home for work. To my amazement I returned home the same evening to find all seven contentedly sitting in a row in their cage. I then gave them food and water and closed the cage door as a protection against cats, hawks, etc. The following morning I repeated the procedure and watched them fly away in a bunch. On my return from work in the evening I again found them all in the cage. My coloured servant girl said that they had been in and out of the cage all day long. I again fed and watered them and closed the door of the cage for the night, repeating my actions the following day by releasing them first thing in the morning. This went on for about three months, during which period several of my fancier friends came along to witness the fact that I did indeed possess Homing Cape Canaries. Gradually the breeding season came round again, and one evening in early August I found that one of the hens was absent, a week later a pair failed to return, which left me with two cocks and two hens. These were allowed to come and go as they pleased. Towards the end of the breeding season another pair failed to return, leaving me with one pair ; these were allowed their freedom for several more weeks until eventually I had to place them in my aviary. They are still there, and at the time of writing show all the signs of wanting to breed.

The immediate questions arising out of all this are : (1) What happened to those that failed to return ? (2) Did they stay away of their own free will ? (3) Were they killed or captured ? (4) Why did one pair under the same conditions remain true homers for several months and not the others ? (5) Does this not prove that it is not cruel to keep wild birds in cages ? (6) Does it prove that birds can develop a true affection for their owners in the same way as dogs, etc. ? (7) Would the young from the remaining pair inherit the homing instincts of their parents ? (8) Is the call of the wild greater than the call of captivity with its security and abundance of food ? I do not know the answers to these questions, one guess is as good as

another. In conclusion, I would like to remind readers that these birds were released in their natural habitat after being in my possession for only a few weeks.

* * *

HYBRID SONNERAT'S JUNGLEFOWL AND DOMESTIC FOWL

By DAVID M. JOHNSON (Port Orchard, Wash., U.S.A.)

Fifteen years ago I crossed a large Cornish Indian Game hen with a Red Junglefowl cock (*Gallus gallus*). These I have line bred all these years perfecting a strain of compact roundness of rather small size with slight pea comb and no wattles. Two of these hens have mated with a Sonnerat's cock ; the fertility has not been high but the chicks are hardy and virile, with astonishingly high capability of remaining alive in spite of the cold, either frost or cloudy, cool days peculiar to the north-west U.S.A.

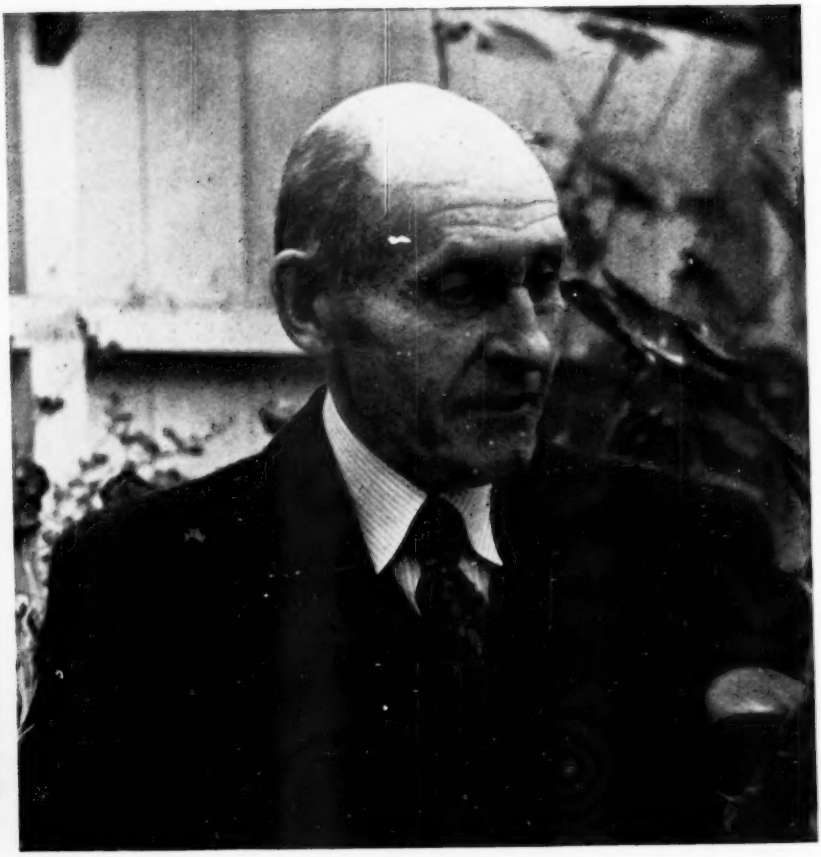
The chicks started to hatch on Easter Sunday and continued to hatch slowly, varying from the usual twenty-one days of the domestic fowl, some hatching as much as three days later than this. The nest was sufficiently humid and every egg that was fertile produced a hardy chick. The fertility rate was two out of fifteen eggs and the other clutch was six chicks out of fifteen eggs.

The chicks were hatched with pin feathers in the wings and in four days had juvenile wings. They were all as much alike as peas in a pod when hatched and to date (18th May) there is very little variation. They develop rapidly and practice flying on the fifth day of life. They are all striped chicks, and the feet and legs are slim and firm in contrast to the puffy legs and feet of chicks with the stigma of domestication.

On the whole I should say that the wild Junglefowl is predominant as the chicks now have striped underparts similar to the female Junglefowl. The tail is carried low, or pointed downwards, and the wings are large as in peafowl chicks. There is not yet any visible comb or any distinction in sex, except in one chick which I suspect may be a cock ; the rest have the appearance of hens.

The chicks demand meat vociferously, as do Junglefowl, and this, with ordinary grain of mixed varieties, has been their only food. The cock Junglefowl is kindly disposed to the chicks and runs about with them.

Mr. Lint, of the Zoological Society of San Diego, tells me that this cross has been achieved previously on various occasions, but unfortunately breeders often neglect to publish records.



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Dr. Maurice Amsler.

To face p. 137.

[This is a cross that must have been bred on several occasions but Mr. Prestwich has no definite record. Dr. Hopkinson gives the cross with parentage reversed : " At the Zoo in 1913."

Delacour says of Sonnerat's or Grey Junglefowl : " Hybrids with Red Junglefowls and domestic poultry are fertile but we do not believe that *sonnerati* has any place in the ancestry of domestic breeds, even those which possess spangle-like spots, as has been advanced by certain authors."—Ed.]

* * *

OBITUARY

" M. A."

The passing, on 11th June, 1952, of Dr. Albert Maurice Amsler deprives the Society of one of its oldest and most able members.

Dr. Amsler had a very extensive medical experience, having been House Surgeon, St. Bartholomew's Hospital ; Clinical Assistant, Hospital for Children, Great Ormond Street ; and Physician and Obstetric Physician, King Edward VII Hospital, Windsor.

He was in private practice at Eton for thirty years and during that time came in contact with thousands of Etonians—being held in such esteem that he was elected an Honorary Member of the Old Etonian Society. He retired in 1936 and went to live at Delmonden Manor.

The breeding of birds was Dr. Amsler's special interest, as opposed to mere keeping for ornament, and his successes were many. Perhaps his greatest feat was the hatching of the Golden-fronted Fruitsucker on three occasions, but none was reared beyond twelve days.

First successes were recorded on nine occasions, Hooded Siskin (1912), Great Tit (1913), Orchard Finch (1915), Lesser Saffron Finch (1915), Grey Francolin (1927), and Hermit Thrush (1927), Blue Rock Thrush (1931), Amethyst Starling (1935), and Black-crested Finch (1939).

Other species bred include Swainson's Lorikeet, some twelve or fourteen broods ; Occipital Blue Pie—this had only been bred once, and that in the previous year by Lord Lilford ; Blue-winged Magpie, Chinese variety ; Painted Finch ; Gouldian ; Siberian Bullfinch ; Orange-headed Ground Thrush ; " American Robin " ; Parrot Finch, and Tricoloured Parrot Finch (some thirty Parrot Finches in a single year).

From the avicultural point Dr. Amsler will probably be best remembered for his success in breeding Blue Robins, mainly by transferring their eggs to the nests of wild birds and allowing them to do the rearing.

While still retaining a keen interest in aviculture—he was Chairman at the British Aviculturists' Club dinner as recently as the 12th March

—Dr. Amsler's time since his retirement was mainly spent in horticultural pursuits : he was a world authority on Camellias and Lilies, and wrote extensively on these and a number of other plants.

In 1951 the Royal Horticultural Society conferred its highest distinction, the Victoria Medal of Honour : happily Dr. Amsler was able to attend the presentation by Lord Aberconway on 26th February, 1952.

Condolence is offered to Dr. Amsler's widow and daughter. The Docter will be sadly missed by his very large circle of friends, medical, avicultural, and horticultural.

A. A. P.

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A MEMORY OF STEEP HOLM

By Dennis Lovell (Hayes, Middlesex, England)

The news that a large-scale project was afoot to ring the young gulls on Steep Holm beckoned memories of my first visit to that lonely Bristol Channel island.

It was early one morning in August when we embarked at Anchor Head, Weston-super-Mare. About an hour later we set foot on the pebbly beach at the eastern end of the island, and I well remember the sense of exhilaration then felt. Our arrival was greeted by a whirling cloud of Gulls, who vociferously expressed their disapproval at such an invasion of their privacy. Wheeling above in an angry crowd they cried, screamed, and laughed hysterically in well-nigh deafening noise.

Steep Holm stands at the mouth of the Severn estuary, midway between Somerset and Glamorgan, and two miles and a quarter from its twin island of Flatholm. Shaped roughly like a rugby football, the island is composed entirely of limestone and covers an area of approximately fifty-seven acres. The summit forms a plateau just over a mile in circumference.

Once ashore, the six-hours stay quickly passed in the exploration of the island and its wild life. Climbing the winding track above the landing place, I was delighted to find many passerines and other small song birds on the sheltered slopes, where sycamore, maple, elder, sloe, lilac, privet, and bramble rioted in profusion. I caught an occasional glimpse of the handsome Yellow-hammer, whose thin note refused to be silenced by a sultry summer day. Several Swifts, one of the earliest of our birds to fly south, alighted on a projecting rock above. Rock-Pipits trilled sweetly, and one had a nest on the grassy verge of the path. My notes also include reference to a Hedge Sparrow, Wheatear,

Linnet, Meadow Pipit, Song Thrush, Blackbird, and a Wren. (It occurred to me that the latter might be a new sub-species, akin to the St. Kilda Wren, for I carefully noted that its bill was bigger and its tail more erect than those of the mainland kind.) Higher still, I surprised a young Gull, dressed in speckled brown, who quickly hid himself under the low-lying privet.

The boatmen, who had brought me across from the mainland, called for a rest now we had gained the summit, and while they sat in the warm sunshine, I took off my mackintosh and strolled across to inspect the ruins of the ancient Priory of St. Michael, which was built on the reputed site of an early Christian shrine, belonging to the monks at Glastonbury.

This hallowed spot was now alive with Gulls—Herring, Lesser, and Great Black-backed. Their nests were everywhere, not excepting the exposed concrete roof of a nearby gun-emplacement. My presence was evidently resented, and I was attacked by shrieks and wheeling wings above, and all around me.

Many immature Gulls sought the shelter of bramble and boulder as I scrambled over the southern slopes, where I also disturbed a suite of Mallards, who promptly took to wing. I found three of their down-lined nests before the flush, returning from the sea, alighted just above me.

The footpads of Sheld-Ducks marked the entrance to one rabbit burrow, indicative of their deep underground nest. About seven of these handsome birds were resting on the waters below; their glossy black, white, and orange plumage lending gaiety to the scene. Oyster-catchers flew over the rocks, and I found their trilling whistle quite pleasant in contrast to the screaming abuse from the parent Gulls.

Consorting with the immature Gulls, I was intrigued to find several fully-fledged young Gannets. Hiding under the mass of privet and crawling quietly forward, I was able to study one of them at close quarters. As large as a goose, its outstanding features were piercing grey eyes, a long dagger bill, and webbed feet. Head, neck, and breast were white flecked with brown, and it had black or very dark brown plumage. These birds were, of course, in their first or second year, for several moults must occur ere the young Gannet dons the more familiar adult dress of nearly all white, with a tinge of buff on the head and neck and deep brown wing-tips.

Magnificent in flight, the Gannet is clumsy in motion on land. I well remember watching these youngsters alight on the plateau; they "touched down" in what seemed a heavy braking manner, with wings, tail feathers, and webbed feet spread to capacity. I wondered if they had travelled far. Possibly from the remote St. Kilda. Or had they flown here from the Grassholm Gannetry? It was easier to guess

at the reason for their presence on the island. At any rate, I concluded that the young Gannets were but resting during migration south.

Pondering these things, I climbed back to the summit. Judging by the number of corpses and skeletons that met my eye, it seems safe to assert that the most perilous stage in a young gull's life is when it first starts to run about. In this case I decided that the murderer was probably some bird of prey. While I was seated at the edge of the north-western cliffs, eating my luncheon sandwiches, I became aware of the guttural croak of Ravens echoing among the crags. On a near-by rock I spotted a pair of these huge crow-like birds, suspicious of my intentions. At intervals of three minutes or so they would circle over my head uttering their deep, angry cronk.

The Raven is amazingly clever on the wing. These two proceeded to entertain me by an exhilarating aerial display over the sea—soaring, gliding, diving, and flying on their backs like R.A.F. aces. I was particularly impressed by their game of tumbling down from a considerable height as if injured, then " flattening out " at the last moment by throwing out wings.

The " show " was suddenly broken by the appearance out of the blue of a sinister looking, yet beautifully streamlined bird—the Peregrine Falcon, who, with incredible speed, swooped at his prey in mid-air. The Ravens turned instantly, each in a different direction, swerving and twisting so skilfully that they easily evaded the Falcon.

It was time to move. I walked some way along the rough path which marks the northern edge of the plateau, until I came to some steps leading to a narrow beach nearly 300 feet below. I sat on the topmost step for a while, watching the Cormorants, dressed in black and bronze with whitish patches, passing low over the water beneath me, when I saw flying in from the sea at a great height a flock of small birds. With swift unerring flight the invaders approached, their sharp-pointed wings urging them through the still air. As the congregation lost height I saw that they were mostly Golden Plovers, but included in their number a few Lapwings.

Climbing on to the roof of a hut I lay motionless watching at close view these lovely creatures. I heard the wild, flute-like cry of the Golden Plover who, still in their striking wedding dress, spangled gold and black with a white border, were sunning themselves or running about picking up seeds and insects.

I slipped down from the hut roof and resumed my stroll, with the inescapable cry of Gulls yet in my ears. The island abounds with rabbits, a lean variety with rust head, nape, and back, which scurried off in all directions as I drew near. A pair of Goldfinches sang from a single thistle head, Linnets were feeding in caraway and clover, and a solitary Turtle Dove camé to glean fruit of the tall withered alexanders.

The tide was now at its lowest ebb. I could see to the east a spit of

sand and shingle, extending outwards from the landing beach for at least 300 yards into the tideway, where a motley of waders were preening themselves or foraging for shellfish, sand-worms, and other sea creatures.

As we left that enchanted island a wind blew up and rain threatened. All day I had watched the Gulls circle and wheel and dive and glide with outspread motionless wings. But the prevailing memory is of their artistry as they now nonchalantly rode the waves, or drifted like flakes of foam on the wind close to the surface of the angry waters.

* * *

REARING WILD WATERFOWL IN CAPTIVITY

By R. S. Mackensen (Yardley, Pennsylvania, U.S.A.)

Last summer my father, William J. Mackensen, and I, procured a number of wild duck eggs by air from Iceland. Represented in this shipment were eggs from the Tufted Duck (*Aythya fuligula*), Barrow's Goldeneye (*Bucephala islandica*), Old Squaw (*Clangula hyemalis*), Northern Eider (*Somateria mollissima*), Greater Scaup (*Aythya marila*), and Black Scoter (*Melanitta nigra*).*

These eggs were incubated by small cross-bred bantams, and we were successful in hatching young of the Tufted Duck, Barrow's Goldeneye, Greater Scaup, and Black Scoter. All young of the first three species were reared to maturity with no difficulty. Three out of six Black Scoters hatched were reared to maturity. The other three never fed, and died within the first week. This we attributed to their highly nervous and shy temperaments, which they had not outgrown up to the time we sent two of them to the Highland Park Zoo at Pittsburgh, Pennsylvania. The third one was killed by a nursing rat. These Scoters remained separate from other young ducks in our holding pen, refusing to have anything to do with them.

It is interesting to note that for about the first week these Scoters, having reached maturity and being placed for the first time in an enclosure with running water of a sufficient amount in which to swim, got thoroughly soaked to the skin each time they went in the water. Mr. J. Delacour informs me that this is quite usual with all Scoters, even wild trapped ones, who have been without swimming water for several days. In fact, he says that they will drown if turned out on a large lake at this time.

As is well known, Scoters are among the most aquatic of the sea ducks and, in the wild, their diet is just about entirely marine animals such as mussels, scallops, oysters, etc. Those which we raised were

* J. Delacour and Ernst Mayr, 1945.

fed only on chicken pellets with a minute portion of whole wheat mixed in. Rearing pens were completely devoid of vegetation. To the best of my knowledge, this is the first time that they have been so raised.

For the benefit of those who may not be familiar with poultry pellets, let me explain that they are merely a finely-ground mash which has been moistened, and then pressed together and baked into small masses varying from the size of ground oyster shells, for chicks and small birds, up to $\frac{3}{4}$ of an inch in diameter for Turkeys and large birds. The open formula of the particular pellet which we used (typical of the formulas produced by most large poultry food manufacturers) follows:

496 lb.	Ground wheat
30 lb.	Fish meal
780 lb.	Yellow corn meal
200 lb.	Fine ground oats
60 lb.	Dehydrated alfalfa meal
200 lb.	Soybean oil meal
50 lb.	Meat scrap
20 lb.	Homogenized condensed fish
50 lb.	Dried corn distillers solubles
10 lb.	Riboflavin supplement
50 lb.	Dried whey product
40 lb.	Dicalcium phosphate
2 lb.	"D" Activated animal sterol
2 lb.	Vitamin A feeding oil
2,000 lb.	of Pellets
6 oz.	Manganese sulphate added.

Guaranteed analysis of the above mixture is

Protein	minimum	16·00	per cent
Fat	minimum	3·00	„
Fibre	maximum	6·50	„

For a number of years my father and I have been advocating the use of poultry pellets for wild Pheasants, Peafowl, and Waterfowl in captivity. We have found that they thrive once they become accustomed to such a diet, regardless of what their food in the wild may be. Here, we believe, is rather conclusive proof that we have been correct in our contentions. Furthermore, we believe that this discovery will make it fairly easy for anyone successfully to keep these birds in captivity, and that it will also make it possible to keep species that heretofore have not done well.

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A BETTER WAY TO FEED HUMMING BIRDS

By CHARLES CORDIER (New York, U.S.A.)

Most of the readers of this magazine are familiar with the longevity records attained by Humming Birds in captivity ranging from two, four, five, up to eight years.

In the light of these records it would seem that the diet for Humming Birds in captivity has been solved satisfactorily. However, this is far from being the case. The birds that live for years are the exceptions and the others that live from forty days to four or six months are the rule. My own experience over the years has convinced me that practically any Humming Bird will live on honey or sugar-water alone for about forty days. Even if fed from the very day of capture on the standard formula of Mellin's food, condensed milk, meat extract, honey, and a dash of vitamins, some will not live on this antiquated formula for more than forty days, such as the Tooth-bills, which, as the structure of the bill implies, are probably largely insectivorous. On the new formula I am advocating this species does very well.

Thus the matter has stood for the last seventeen years and the poor collector going in for Humming Birds simply never knew where he stood after the crucial forty-day test, the period during which these birds live anyway, no matter how wrongly they are being fed.

Fortunately I have been corresponding over the years with Dr. Béraut of Rio de Janeiro, an ardent Humming Bird fan who keeps some forty hummers in thirty species in one single small room with the greatest success. He is keeping in splendid health all the species found in the State of Rio de Janeiro, where I have collected twice, and which I never managed to keep for long. Dr. Béraut simply never liked the idea of these birds getting any cereal in their food, as in nature they have no chance to do so. Little by little he evolved his own formula and in view of his enthusiasm over it it did not take me long to make up my mind to adopt it. The improvement is so phenomenal I do not hesitate in passing the new formula on to our readers. In essence it is simply the known formula from which the Mellin's Food has been left out and essential vitamins added. At this writing I have a collection of seventy specimens consisting mostly of mountain species which are, by far, more delicate than lowland hummers or, rather, I should write of their frailty in the past tense, as losses have been practically nil.

I am showing here quantities to feed forty Humming Birds. It must be borne in mind that slight variations in the composition are in order. The vitamin requirements indicated are desirable minima. Giving a bit more does not matter. Not all honeys used are of equal sweetness. More important than anything is the right quantity of liquid a Humming Bird must consume per day. The guiding rule here is : better have the formula too weak than too strong. If the liquid is too weak

the birds can make up for the deficiency by drinking more, whereas if the formula is too strong they will suffer thirst and are sluggish. About the right quantities the birds should drink see at end of article. Here is the formula :

Salted meat extract, such as Armours in glass jars	3 grams
Sweetened condensed milk	40 grams
Honey	100 to 180 grams
Water to complete 1,000 cu. cm. or roughly 1 quart.	
Vitamins A and D, for proportion see under vitamins.	

After our return from Ecuador to the United States we have noticed that the honey purchased here is so much weaker that we have to add almost twice as much of it to get a formula of equal sweetness. Therefore no hard and fast rule can be given regarding the proportion of honey to be incorporated, and the amount should be experimented with until the birds feed as much of the formula as indicated at the end of this article. Do not alter the amount of condensed milk recommended.

We feed this mixture from 8 a.m. to about 6 p.m. At that time it is replaced by honey-water to which vitamins B and C have been added. If on hot days the food should get sour after staying in the bottles from four to five hours, replace by fresh food. In zoological gardens the complete formula is usually given at 8 a.m. and noon and replaced by honey-water at 4.30 p.m. to 5 p.m.

The honey-water is prepared by diluting 150 grams or more of honey with enough water to make up 1,000 cu. cm. or one quart.

How to give the vitamins :—

The druggist should make up for you the following formula :
One ampoule Vitamin A of 600,000 units.
One ampoule Vitamin D of 100,000 units.
In 30 cu. cm. of almond oil.

The finished preparation will represent roughly 800 drops and each drop coming out of a cut-off dropper (drops from a pointed dropper are smaller) will contain 750 units of vitamin A and 125 units of vitamin D. Beat four drops of this vitamin preparation into the condensed milk you are using. Dilute the condensed milk first with a little hot water to make the mixing easier. If done right the vitamins will remain in suspension in the mixture. It will be noted that each bird is getting that way, in theory, at least about 75 units of vitamin A and 12 units of vitamin D daily.

Into the honey-water given in late afternoon add the contents of one 10 mg. ampoule of vitamin B (chlorhydrate of thiamine) and one 100 mg. ampoule of vitamin C (ascorbic acid).

During several months I have experienced with a multi-vitamin preparation such as Vi-Penta, Abdecol, etc., one drop to 35 cu. cm. of

the formula and the honey-water. Birds did very well; however they had difficulty in getting their wing-feathers moulted. By switching to the four vitamins as described above in detail they moult their wing-feathers without trouble.

One last word about the quantity Humming Birds should drink of the formula in ten hours, if the formula is prepared correctly :

Small Humming Birds such as Wood Stars, Flame-bearers, Racket-tails, Rufous and Costa's from California, Emeralds : 9 to 10 cu. cm.

Medium-sized birds—Anna's H.B. from California, Sapphires, Wood-Nymphs, Ruby and Topaz : 12 to 15 cu. cm.

Slightly larger than medium-sized ones—Mangos, Violet-Ears : 20 cu. cm.

Large H.B.—Brazilian Swallow-tails, Giant H.B., Sapphire Wings, Topaza Pella, 25 to 30 cu. cm.

* * *

THE BARBARY DOVE

By Derek Goodwin (Virginia Water, Surrey, England)

The Barbary or Domestic Collared Dove, known to Americans by the descriptive name of Blond Ring Dove, is a familiar cage-bird almost throughout the world. Exactly when and by whom it was first domesticated still seems to be uncertain. Many have supposed it to be the " Turtle Dove " that was used in biblical times for sacrifices. Although possible, this is a difficult point to try to prove, especially in view of the fact that three wild species of *Streptopelia*, one of them very similar to the tame bird, are—and presumably always were—common in Palestine. On the other hand everything suggests that the Barbary Dove has been domesticated for a very long period. It was certainly well known in England in the eighteenth century, when Albin published a coloured plate of a Barbary Dove under the title of " The Turtle-Dove from the East Indies ", and informed his readers in the description that " They are tame pretty Birds and kept in Cages by the Curious where they will breed and bring up their young ". Linnaeus, after saying mistakenly that it is found in India, adds " our common Turtle-dove " obviously implying that it was widely kept in Sweden in his day.

Some authorities consider the domestic Barbary to have been derived from the Collared Turtle-dove or Indian Ring-dove (*Streptopelia decaocto*) which is found from South-Eastern Europe across Asia to Japan, and has of recent years spread westward through Europe. As was pointed out at length by Dr. Hartert in 1916 (*Novitates Zoologicae*, xxiii, pp. 78–88) there are, however, many reasons for

considering this incorrect—particularly the dissimilarity of their cooing, and the fact that the Indian Ring-dove is larger than the domestic bird, whereas it is an almost universal tendency for domestic forms to increase in size—and every reason for supposing the real ancestor of the tame bird to be the Rose-grey Turtle-dove (*Streptopelia roseogrisea*) which is found in arid regions of northern Africa south of the Sahara, and southern Arabia. Some modern systematists, however, consider the Rosy-grey Dove and the Indian Ring-dove to be conspecific. But in so far as concerns one of the chief points of interest in connection with the domestic bird, it is immaterial from which of these two species (or races) it originated. Unlike nearly all other domestic birds the Barbary Dove shows little variation. Apart from a white variety known to bird-dealers as the "Java Dove" it is everywhere the same creamy fawn bird with black neck-ring and ruby eyes as our familiar childhood pets. In this it differs from the Rosy-grey Dove (and incidentally from *all* other wild species of ring-necked Turtle-doves) which although almost identical in markings is darker above with no buffish tinge and with a vinous pink tint on head and breast.

That a domestic bird of long standing should show so little variation is surprising, but for the natural colour to be unknown in the domestic form is quite without parallel, and poses some interesting queries. Are our domestic doves perhaps descended from some race of the Rosy-grey Dove that has remained undiscovered by Europeans? This seems most unlikely. The only evidence in its favour is that of an ornithologist who in recent years recorded that in a certain part of Africa he observed doves of this species paler than any he had seen before. He did not, however, secure any specimens, nor when questioned could he recall any vital details as to their appearance. It seems more probable that the creamy-buff form arose as a sport from the wild type and is a true-breeding recessive. The latter is suggested by the fact that when it is crossed with other species of Doves the hybrids (at least those that the writer has been able to examine), although intermediate in markings, show no sign of the pale tint of the domestic parent. That any people should have domesticated only abnormal examples of a species sounds at first an absurd proposition. But is it? Man has ever valued the unusual and despised the commonplace irrespective of their intrinsic merits. Even to-day white pheasants and peacocks are valued more highly than normal coloured birds of far greater beauty. The wild Doves of normal colouration, being no doubt abundant, there would have been little incentive to bother to breed in captivity a bird of which specimens could easily be trapped or netted when required. On the other hand when a sport of the creamy-buff colour appeared, it would no doubt have made an immediate appeal by its novelty and beauty.

Also the pale plumage may well have suggested a spiritual purity that rendered such birds particularly efficacious as sacrifices, and thus religious as well as temporal motives may have encouraged its domestication. The discovery that if a pale bird was paired to the relatively worthless normal type all the young resembled the latter would no doubt have sufficed to induce the early breeders to concentrate solely on the former. In the absence of any detailed knowledge of genetics it is most unlikely that any pointed experiments in the way of interbreeding normally coloured young of mixed parentage would have been undertaken, the occasional production of a pale bird by normal parents being more likely to have suggested supernatural rather than genetical implications. Thus the pale birds alone would have finally become domesticated, and in that state disseminated throughout the world.

The above is admittedly mere hypothesis, but one that seems best to fit the facts of the case. At all events to whoever first domesticated the Barbary Dove we are indebted for a bird which is a tame and charming pet even when " kept in Cages by the Curious ", but is a thousand times more attractive if allowed to fly at liberty, as it easily may be, provided one takes care to shut it up safely at night out of reach of owls and cats.

* * *

BRITISH AVICULTURISTS' CLUB

Meetings and dinners during the 1952–53 session have been arranged for the following dates :—

10th September, 1952

12th November, 1952

14th January, 1953

11th March, 1953

13th May, 1953

ARTHUR A. PRESTWICH,
Hon. Secretary.

BREEDING OCELLATED TURKEYS AT THE SAN DIEGO ZOO

By J. DELACOUR (Los Angeles, California, U.S.A.)

Ocellated Turkeys are the most beautiful of all the game birds of the New World. In the richness of their irridescent plumage they rival the gaudiest Pheasants of Asia. Their large size, only slightly inferior to that of the common Turkey, their graceful shape, and the curious display of the cock all contribute to their striking appearance. A native of the hot lowland forests of Honduras, Guatemala, and southern Mexico, this fine species has always been scarce in European collections, where a few have figured now and then in the past, but never bred. In 1938 Mr. C. Cordier brought to Clères and to Leckford less than two dozen birds caught, or reared from the eggs, in the Peten district of Guatemala. But at the end of the last war the only birds left in England were merely a couple of hens at the London Zoo.

After the war Mr. Cordier accompanied Dr. D. S. Newill to the Peten, and they brought over a nice consignment, which was distributed among American Zoos and a few game breeders. Two or three young have been reared in recent years at the Washington Zoo and at Mr. C. Hooke's game farm near Napa, California, now closed. But the only real breeding success of these fine birds has occurred at the San Diego Zoo, where a very favourable climate as well as special and adequate care by the Curator of Birds, Mr. K. C. Lint, make conditions particularly propitious.

Mrs. Belle J. Benchley, Executive Secretary, Zoological Society of San Diego, reports as follows :—

" Ocellated Turkeys had been birds to conjure with until early in 1946, when several American zoos, including the Zoological Garden of San Diego, joined with Dr. D. S. Newill, of Connelsville, Pennsylvania, in a trip into Guatemala to collect the young birds with the aid of local citizens.

" Dr. Newill, with the help of Mr. C. Cordier, brought back a fairly large group of young birds. Each zoo which participated had provided the sum of $500.00 for one pair of birds, and some of the zoos had arranged for more than one pair.

" In November, 1946, Dr. Newill arrived from Guatemala with a good collection and one pair was shipped to San Diego. The hen was in a very weakened condition and the male had an injured leg which had resulted in a stiff-joint at the knee. Otherwise he was in fine condition and after his first moult made a show which was all anyone could have expected.

" The hen had also greatly improved during the winter at the hospital of the zoological garden. Early in June, 1947, she began

laying, and during that season she laid a total of twenty-eight infertile eggs. The male showed no signs of sexual maturity, and it was not until the following spring, 1948, when he really had attained full mature plumage, that he began to display any signs of mating with the hen. We could only hope for the best, but in case of failure I had contacted the University of California through its Agricultural School at Davis which was most anxious to obtain specimens or fertile eggs.

" And so, when the first eight eggs again proved to be infertile, indicating complete inability to mate by the male, the head of the Department, Dr. Lorenz, came down and artificially inseminated the hen. As the result of this effort fourteen young Ocellated Turkeys were hatched.

" Hatching was only the beginning of our trouble, for these young Turkeys were subject to all of the troubles that beset the commercial Turkey raisers of Southern California. Especially the early period of summer in San Diego, with its overcast skies, and foggy mornings contributed to their misery and deaths. However, we did raise five fine husky youngsters from this artificial insemination and during the second season we hatched and raised seventeen fine young Ocellated Turkeys.

" We used artificial insemination on the imported pair for three summers, but the third summer the finest and healthiest young we produced were from our own trio of birds which we had raised in 1948 through the first artificial insemination by Dr. Lorenz. The original hen was mated with the best cock of the 1948 hatch.

" The feeding habits of these birds are quite similar to our North American Turkeys. They must have a high protein diet, including mealworms, insects, and well balanced commercialturkey mash and chick feed which play an important part. They consume weed seeds too, and it appears that if we could turn them out in a large natural area where they could pasture on the new young weed growth and catch plenty of native insects we would not suffer so many sleepness nights and headaches as they now inflict.

" However, Ocellated Turkeys are too rare to turn loose in an area populated by a sight-seeing public, for many visitors would certainly want to go home proudly waving a tail feather from one of the rarest and most beautiful birds in captivity. With proper incubation and three nice trios of mature birds we do feel that we will be able to keep up an exhibit at least of these gorgeous birds. Fortunately also for us, at least, the " pair " that the Zoological Garden of Philadelphia received consisted of two hens, and consequently that zoo was happy to exchange one of its hens for a San Diego hatched male. This gave us a new strain which we have combined with one of our home-raised cocks, and we hope Mr. Griswold will be successful in increasing his flock.

"To date there has been only one other zoo that has succeeded in producing fertile eggs, which was the National Zoo at Washington, D.C. Now our young stock has gone to two of the European zoos, and we hope that with a large number of institutions exhibiting and working with these turkeys the Ocellated Turkey may be preserved, if only in captivity. They are apparently becoming increasingly scarce in the wilds, which probably indicates that they are neither prolific in reproduction, very long lived, nor able to cope with advancing civilization and its ultimate destruction of natural habitats."

There was a good stock of Ocellated Turkeys at San Diego when I last visited the zoo on 29th June, 1952. Besides the three breeding pens of a cock and three or four hens, five young birds reared in 1950 and five more hatched in 1951 make up a total of some two dozen specimens. About twenty chicks were lively and well, and others due to hatch. Mrs. Benchley is determined to establish and propagate this most interesting species and to distribute her birds' offspring as widely as possible.

* * *

NEWS AND VIEWS

The Council of The North of England Zoological Society, through the Director-Secretary, G. S. Mottershead, kindly invite members of the Avicultural Society to lunch at the Zoological Gardens, Chester, on Saturday, 6th September, 1952.

The invitation to lunch is *confined to members*. Free admission to the Zoo is offered to friends, and lunch may be reserved for them. Members intending to accept the invitation must notify the Hon. Secretary, 61 Chase Road, Oakwood, N. 14, before 30th August, 1952.

The Chester Zoo is 180 miles from London, 15 miles from Liverpool, 40 miles from Manchester, and 72 miles from Birmingham.

Suggested trains (subject to confirmation) from and to London are :

Leave Euston	8.30 a.m.
Arrive Chester	12.26 p.m.
Leave Chester	5.10 p.m.
Arrive Euston	9.15 p.m.

Fares (subject to revision) return, 1st class, £3 18*s.* 10*d.*
3rd class, £2 12*s.* 6*d.*

There are excellent bus services from Chester Market Square, Service No. 13, to within 150 yards of the main entrance to the Zoo and a regular direct Zoo service to the north entrance; also a direct service from "Woodside", Birkenhead, to the north entrance.

Visitors arriving by train will have to proceed by bus to the Market Square in order to catch a bus to the Zoo. If members arriving by the London train would kindly advise the Hon. Secretary, arrangements

could be made for them to be conveyed direct to the Zoo from the station.

* * *

In the Queen's Birthday Honours the honour of Knight Bachelor is conferred on Edward J. Hallstrom, " For philanthropic and public services ".

* * *

The Royal Zoological Society of Ireland has appointed C. S. Webb Superintendent of the Phœnix Park Zoo, Dublin, in succession to the late C. L. Flood.

* * *

The Queen and the Duke of Edinburgh, accompanied by the Duke of Beaufort and the Earl of Dalkeith, visited the Severn Wildfowl Trust at Slimbridge, on 25th April. The main purpose of the visit was to see the five Trumpeter Swans presented to Her Majesty during her tour of Canada.

* * *

The Cooper Ornithological Club has done our Hon. Fellow, F. H. Rudkin, Sr., the signal honour of dedicating to him the coloured plate in *The Condor*, 1952, March–April number. The plate is from a historic painting by Andrew Jackson Grayson of the Red-fronted Parrot, *Amazona finschi*.

* * *

Six Pelicans took up residence at St. James's Park on 24th April. Four of the six are Texas Browns, presented by the Governor of Texas, and the other two are Eastern Whites, a gift from the Ameer of Bahawalpur. The birds had been wintered at the Zoo, and while there had the extensor tendon of one wing severed—now considered a more humane alternative to pinioning.

* * *

The President's Garden Party on 31st May was, as usual, a great success. The weather was a considerable improvement on last year. Heavy rain in the morning cleared by three o'clock, and the many visitors were able to enjoy Foxwarren Park and its numerous attractions. One of the charms of these parties is their informality. Mr. and Mrs. Ezra spare no effort to make their guests feel welcome ; consequently, when they leave they take with them happy recollections of a very pleasant afternoon, and look forward with lively anticipation to the next party.

* * *

J. M. Gill, Southall, reports a brood of five Barnards out of the nest and flying well. The parents have now bred during four successive seasons ; young previously reared being three, three, and two. The pair

of Plum-heads bred in 1949 hatched a young one but it was found dead about three weeks later. The old hen, mated to a recent importation, hatched one of four eggs and the young one is now ten days old and thriving.

Ring-necks, split-lutinos, have four young, three green and one lutino. During the past five seasons this pair has reared twenty-one young, nine being lutinos.

A. A. P.

* * *

LONDON ZOO NOTES

By JOHN YEALLAND

The first of the South American Jacanas to be exhibited in the Gardens was recently purchased. It is the Surinam Jacana (*Jacana spinosa jacana*)—a curious bird with a carpal spur which is like a rose thorn and quite as sharp, a large area of silvery lemon yellow on the flight feathers and, of course, the very long toes.

Other purchases are a Golden-winged Sun-bird (*Drepanorhynchus reichenowi*) and two pairs of Baikal Teal (*Anas formosa*).

Those received in exchange include a pair of Dufresne's Waxbills (*Coccopygia melanotis*)—perhaps the most delightful of all the passerine seed-eaters—a Red-crowned Parrot (*Amazona rhodocorytha*) ; a pair of White-eared Conures (*Pyrrhura leucotis*) and two Grey-headed Gallinules (*Porphyrio poliocephalus*).

The presentations consist of an Ocellated Turkey (*Agriocharis ocellata*) ; a Great-billed Touraco (*Tauraco macrorhynchus*) ; a Sierra Leone Green Fruit Pigeon (*Vinago calva sharpei*) ; two African Pygmy Geese (*Nettapus auritus*), and the late Mr. C. T. Maxwell's small collection of psittacine birds which includes a Banksian Cockatoo (*Calyptorhynchus banksii*).

The three Great Eagle-Owls hatched early in the year are almost fully grown and the Snowy Owls are nesting.

The Quaker Parrakeets have built one of the large communal nests of twigs, and this makes an interesting exhibit in one of the Parrot House aviaries.

A Green-winged King Parrakeet has been bred, but the eggs of the Grey-winged Trumpeters were again infertile.

The Stone Curlews proved themselves to be two females by each laying eggs. One of these clutches was incubated for a few days by Ringed Plovers who subsequently nested on their own account, but did so near enough to the front of the aviary to tempt a thief to cut the wire-netting and remove the three eggs.

Common Rheas laid and plaster of Paris " eggs " were placed in

the paddock in the hope of inducing the male to incubate, but someone climbed two fences and braved the wrath of the male in order to secure this disappointing prize.

The Night Herons seem to be nesting as usual in the willow trees of their aviary and a Gannet is sitting.

The King Penguins have laid, as have Sclater's Curassow and West African Crowned Crane.

A Gaboon Forest Robin, brought from British Cameroon in 1948 by Mr. Webb, laid two eggs. It seems that the eggs of this bird have not been described and so, of course, these have been sent to the Museum. A Blue-shouldered Robin Chat brought at the same time also laid two—the normal clutch—and this bird, together with a mate, has been sent to Foxwarren in the hope of a breeding success.

* * *

NOTES

ACKNOWLEDGMENT.

The Editor acknowledges with many thanks, permission to print, and the loan of the block of, the portrait of the late Dr. Maurice Amsler, by the Editor of the *Journal of the Royal Horticultural Society*.

CORRECTION.

In the May–June number, page 106, line 26, for " Roughly speaking he is green, paler and *yellow* beneath " read " *yellower* ".

* * *

CORRESPONDENCE

UMBRELLA BIRD IN NATIONAL ZOOLOGICAL PARK, WASHINGTON

To-day, 4th July, 1952, an interesting bird was added to the collection of the National Zoological Park. It is the Umbrella Bird, *Cephalopterus ornatus*. This bird was named in 1850, but in 1836 Swainson likened its crest to an umbrella. Shaw referred to the species as the Umbrella'd Chatterer. The bird is so called from the remarkable crest of feathers it wears, the shafts of which, when displayed radiate on all sides, reaching beyond the tip of the beak, and forming a perfect dome some five inches in length by four inches wide.

Another curious appendage is a cylindrical fleshly process, a plumed wattle, an inch and one-half long, pendent from the front of the neck, and clothed in imbricated feathers. The bird is about the size of a crow, its plumage entirely black, glossed with blue in places and especially on the crest and wattle. This species inhabits Colombia, Guiana, and a great part of Brazil and Ecuador. The Umbrella Bird is a member of the family Cotingidæ, the group that embraces the Bell Bird and the Cock-of-the-Rock. Its diet in captivity is rather simple. The bird seems to thrive upon hard boiled egg grated, Mocking Bird food, and all varieties of fruits such as banana, orange, cherries, and a bit of raw hamburger. It is also fond of mealworms and the larvae of other insects.

MALCOLM DAVIS.

[A photograph of the Long-Wattled Umbrella Bird, *Cephalopterus ornatus penduliger*, in the New York Zoo was published in the AVIC. MAG. Sept./Oct. No. 1950.—ED.]

TURQUOISINE PARRAKEETS

I am writing about a letter that appeared in the Magazine of Jan.–Feb., 1952. It was from Mr. Boosey *re* some Turquoisines bred by a member in California.

I think I should point out that " Erythism " is fairly common among Turquoisines in the wild state ; I have seen a lot of it. The Turquoisine's main range is now in the Narrabri district, about 400 miles north-west of here. The red on these birds is quite characteristic. It differs from that in a Splendid in three main ways :—

(1) It is commoner in hens than in cocks.

(2) It is situated mainly, or completely, in the posterior part of the abdomen from between the legs to the vent.

(3) It is a very much darker red, being to the red on a Splendid as that of a Maroon Tanager is to that of a Scarlet Tanager.

I once had a cock bird every feather of whose breast and abdomen was outlined in red. The late Mrs. Ike Winson, of Appin, N.S.W., had a cock that was almost *all* red, from beak to vent, and the patch on the wing covered almost the whole wing. It was a most beautiful bird. I have seen hens with a red wing patch but they are rare. Mrs. Winson's bird was trapped at Teny-Hi-Hi in the Narrabri district.

The Australian Museum in Sydney has a lot of these skins, donated by the late Mr. Wachsman and by myself. It may be suggested that these birds are hybrids. *This is not so.* They are *true* Turquoisines. I have no doubt that the Californian birds are showing some of this characteristic.

R. E. B. Brown.

6 Baker Street,
Newcastle, N.S.W.
Australia.

(The Editor does not accept responsibility for opinions expressed in articles.)

* * *

CANDIDATES FOR ELECTION

D. D. Arcozoo, c/o Union Insurance Society of Canton, Ltd., Head Office, Hong Kong. Proposed by A. A. Prestwich.

W. Barker, Amiens, Via Stanthorpe, Queensland, Australia. Proposed by Miss K. Bonner.

B. Benedict, 96 Hamilton Terrace, St. John's Wood, London, N.W. 8. Proposed by Miss K. Bonner.

Dr. M. Burton, British Museum (Natural History), Cromwell Road, London, S.W. 7. Proposed by Miss P. Barclay-Smith.

W. H. Hanning, Jr., Waukon, Washington, U.S.A. Proposed by George W. Noreen.

Hans Limberg, Harscampstrasse 62, Bad Aachen, Germany. Proposed by Miss P. Barclay-Smith.

J. A. MacTavish, "Forrest Bank," 20 Damdale, Peebles, Scotland. Proposed by J. H. Reay.

Mrs. N. Prean, North Luffenham Hall, North Luffenham, Rutland. Proposed by E. Wilford Smith.

Mrs. D. A. Speed, 925 Clinton Avenue, Fresno, California, U.S.A. Proposed by Payson Vucovich.

Lady Troubridge, Middle Oakshott, Hawkley, Liss, Hants. Proposed by E. J. Boosey.

NEW MEMBERS

The twenty-two Candidates for Election, proposed in the May–June, 1952, number of the Avicultural Magazine, were duly elected members of the Society.

READMITTED

Hylton Blythe, 5 The Avenue, Flitwick, Beds.

CHANGE OF STYLE

Sir Edward Hallstrom.

CHANGES OF ADDRESS

O. E. Clements, to 1 Bayswater Road, Highlands, Salisbury, Southern Rhodesia.
Dr. R. E. Evans, to Greenbank, Heughfield Road, Bridge of Earn, Perthshire.
W. H. Gordon, Jr., to 4412 West Sixteenth Street, Lubbock, Texas, U.S.A.
G. T. Murray, to 821 Buchanan Street, Gary, Indiana, U.S.A.
M. C. Pugh, to 18 Beech Road, Monmouth, Mon.
W. H. Smith, to "The Bungalow," Georgia, Nancledra, Cornwall.
Pieter Swanepoel, to Box 366, Pietermaritzburg, Natal, South Africa.
C. S. Webb, to The Royal Zoological Society of Ireland, Phoenix Park, Dublin, Eire.

CORRECTED ADDRESS

H. Moody, 91 Barbara Avenue, Uppingham Road, Leicester.

DONATIONS

	£	s.	d.
W. L. Eaves	1	2	0
Captain C. Scott-Hopkins . .	1	2	0

MEMBERS' ADVERTISEMENTS

The charge for Members' advertisements is ONE PENNY PER WORD. *Payment must accompany the advertisement, which must be sent on or before the 15th of the month to* A. A. PRESTWICH, 61 CHASE ROAD, OAKWOOD, N. 14. *All members of the Society are entitled to use this column, but the Council reserves the right to refuse any advertisements they consider unsuitable.*

Good aviary home wanted for very tame hen Jackdaw and pair 1950 aviary-bred Blackbirds.—Miss B. ADAMSON, 59 Wellington Street, Slough.

"AVICULTURE"

VOL. I

The stock is very nearly exhausted. This is the last opportunity to order a copy, £1. 1. 0, post free, from the Hon. Secretary, 61 Chase Road, Oakwood, London, N. 14.

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